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Internal Docket No. PD970090
Customer No. 24498

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Remarks/Arguments

Claims 1-3 and 6-10 are pending. Claims 1 and 10 have been amended to more clearly and distinctly claim the subject matter that applicant regards as his invention. Support for the amendment to claims 1 and 10 are provided, for example in the description of the background of the invention, on page 1, ll. 9 – 13; page 1, ll. 18 – 24; page 2, ll. 3 – 13 and 30 – 34 as well as in the description of the present invention at page 3, ll. 33 – 35; page 4, ll. 3 – 10, ll. 15 – 19 and ll. 28 – 35; page 5, ll. 11 – 15; page 6, line 27 to page 7, line 9; page 8, ll. 4 – 10, ll. 22 – 25 and ll. 31 – 36 and page 9, ll. 12 – 30. No new matter is believed to be added by the present amendment.

Rejection of claims 1-3 and 6-10 under 35 U.S.C. § 102 (b) as being anticipated by Takokoro et al. (US Pat No 5025430)

The examiner maintains in the Response to Remarks that magnet 8 of Takokoro corresponds to the information erasing means recited in the claims. For the reasons discussed in applicant's previous responses, applicant respectfully disagrees with such an assertion. As previously discussed, the concept of initializing the magneto-optical recording medium and actually erasing the information stored on the recording medium are recognized to be separate and distinct concepts to those skilled in the art. Applicant believes the Office Action has failed to properly distinguish between these concepts. However, to move the prosecution of the application forward, applicant has further amended claims 1 and 10 to more clearly distinguish the present invention from the teachings of Takokoro.

Claim 1 has been amended to recite:

an information erasing means, which erases information previously recorded for reproduction by the reproducing device, and, in the case of recording information, a writing device, formed from a writing magnet and an optical scanning device, for overwriting information or data recorded on a magneto-optical recording medium, wherein

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the information erasing means is formed by an erasing magnet moving with the optical scanning device and having a magnetic field which is directed opposite to the magnet of the writing device,

the information erasing means is connected with the optical scanning device for moving with the optical scanning device to one of erase, and erase and initialize the magneto-optical recording medium only in a limited region moving with the optical scanning device upstream of a track to be written directly before the recording of new information or data and

has a field strength sufficient
 to initialize the magneto-optical recording medium and
 to erase information previously stored in a recording layer on the magneto-optical recording medium facing the optical scanning device without the assistance of a laser

for directly overwriting information or data recorded on a magneto-optical recording medium at high data rate

without a magneto-optical writing device for erasing recorded information or data. (emphasis added)

Thus, claim 1 has been amended to recite that the information erased by the information erasing means corresponds to information previously recorded for reproduction by the reproduction device. Claim 10 has been amended to similarly recite this feature. As discussed below, magnet 8 of Takokoro, which is alleged to correspond to the recited information erasing means, does not actually erase the information recorded for reproduction by a reproduction device.

As previously discussed, Takokoro discloses a recording layer 3 and supplementary layer 4. The recording layer 3 is the layer facing the optical scanning device for recording or reproducing information by the reproducing device. That is, the device records the information to be reproduced onto recording layer 3, and then subsequently reads the information from layer 3. This is the stored information that is overwritten in reference to a rewritable layer, which means that information previously stored on the information layer is erased.

By contrast, supplementary layer 4 of Takororo is an additional, or auxiliary layer, which is not directly facing the optical scanning device for recording or reproducing information on the medium, is not readable by the optical scanning device, and is uniformly magnetized by initializing magnet 8 without erasing information that is stored on the recording layer 3. That is, the magnet 8 does not

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erase information previously recorded for reproduction by the reproduction device
as recited in the amended claims.

Furthermore, Takororo discloses that supplementary layer 4 enables the erasing of information previously stored on readable layer 3, so that after less than one revolution no information is included in layer 4. However, enabling the erasure of information stored on layer 3 is an entirely distinguishable operation from actually performing the erasing operation. The information stored on layer 3, which contains the information to be reproduced, is erased by a magneto-optical writing device (spot 6 and bias magnet 9).

Supplementary layer 4 does not enable new data to be written over old data directly in supplementary layer 4 as interpreted by the Examiner. Takororo specifically teaches: "when the second layer 4 (supplementary layer 4) passes over the initializing magnet 8 it is uniformly magnetized in the up direction, regardless of the magnetic alignment of the first layer 3 (recording layer 3). At room temperature the first layer 3 (recording layer 3) retains its existing magnetic alignment, being unaffected by the magnetic field generated by the initializing magnet 8 or the magnetic field generated by the magnetization of the second layer 4." (column 2, ll. 26 – 33, emphasis added). This portion indicates that the magnetization of supplementary layer 4 as described enables new data to be written over old data directly in recording layer 3, that is, it enables overwriting of data on recording layer 3. However, the operation does not actually erase information previously recorded for reproduction.

Additionally, the initializing magnet 8 of Takororo has an external field H_{ini} that is greater than the coercive H_{c2} of the supplementary layer 4. However, the H_{ini} is not greater (it is smaller) than the coercive H_{c1} of the recording layer having the reference sign 3 as stated by the Examiner. The stored information (stored in the recording layer) is unaffected and is not erased/magnetized by the external field of magnet 8 as stated in the portion of Takororo cited above.

Finally, the claims have been amended to recite that the erasing magnet according to the present invention is moving with the optical scanning device ... to one of erase, and erase and initialize the magneto-optical

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recording medium only in a limited region moving with the optical scanning device upstream of a track to be written directly before the recording of new information or data. Applicant submits that nowhere does Takokoro teach or suggest these features.

For at least the reasons discussed above, applicant submits that Takokoro fails to disclose or suggest each and every limitation of amended claims 1 and 10, and thus, these claims, and the claims that depend therefrom, are not anticipated by Takokoro.

Rejection of claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Takokoro in view of Kamioka (US Pat No 5493548)

Applicant submits that for the reasons discussed below amended claim 10 are patentably distinguishable over the teachings of the suggested combination of references.

The examiner acknowledges that Takokoro fails to teach or suggest a second optical scanning device for reproducing data and the two optical scanning devices simultaneously record and reproduce data. Kamioka is cited to supply the missing elements of Maeda.

However, applicant submits that even assuming arguendo that Kamioka teaches the alleged missing elements of Takokoro, and the suggested combination is proper, Kamioka still fails to teach or suggest the information erasing magnet, which Takokoro fails to disclose or suggest as discussed above. Therefore, applicant submits that the suggested combination of Takokoro and Kamioka still fails to overcome the defect of Takokoro discussed above with respect to claim 1, and as such, present claim 10 is patentably distinguishable over the suggested combination.


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Having fully addressed the Examiner's rejections it is believed that, in view of the preceding amendments and remarks, this application stands in condition for allowance. Accordingly then, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the applicant's attorney at (609) 734-6815, so that a mutually convenient date and time for a telephonic interview may be scheduled.

Respectfully submitted,

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